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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,610	05/31/2001	Dwip N. Banerjee	AUS9-2001-0361-US1	1787
40412	7590	08/19/2005	EXAMINER	
IBM CORPORATION- AUSTIN (JVL) C/O VAN LEEUWEN & VAN LEEUWEN PO BOX 90609 AUSTIN, TX 78709-0609			BAYARD, DJENANE M	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/870,610	Applicant(s) BANERJEE ET AL.	
	Examiner Djenane M. Bayard	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2005 and 12 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7,8,10,11,13,14,16,18 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 is/are allowed.
- 6) ☒ Claim(s) 1,5,7,8,11,13,14 and 18 is/are rejected.
- 7) ☒ Claim(s) 3,10,16 and 21-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/19/05, 8/02/05</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This is in response to amendments filed on 4/21/05 and 5/12/05 in which claims 1, 3, 5, 7-8, 10-11, 13-14, 16, 18, and 20-27 are pending.

Drawings

2. The formal drawings filed on 5/31/01 are accepted.

Affidavit

3. The Affidavit filed on 4/21/05 under 37 CFR 1.131 has been considered but is ineffective to overcome the Goldstone reference.

Formalities

- I. All the inventors of the subject matter claimed must submit an appropriate oath or declaration to overcome the publication. Only one inventor signed the affidavit.

- 1) *The following parties may make an affidavit or declaration under 37 CFR 1.131:*

(A) All the inventors of the subject matter claimed.

(B) An affidavit or declaration by less than all named inventors of an application is accepted where it is shown that less than all named inventors of an application invented the subject matter of the claim or claims under rejection. For example, one of two joint inventors is accepted where it is shown that one of the joint inventors is the sole inventor of the claim or claims under rejection. Affidavits or declarations to overcome a rejection of a claim or claims must be made by the inventor or inventors of the subject matter of the rejected claim(s), a party qualified under 37 CFR 1.42, 1.43, or 1.47, or the assignee or other party in interest when it is not possible to produce the affidavit or declaration of the inventor(s). Thus, where all of the

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named inventors of a pending application are not inventors of every claim of the application, any affidavit under 37 CFR 1.131 could be signed by only the inventor(s) of the subject matter of the rejected claims. Further, where it is shown that a joint inventor is deceased, refuses to sign, or is otherwise unavailable, the signatures of the remaining joint inventors are sufficient. However, the affidavit or declaration, even though signed by fewer than all the joint inventors, must show completion of the invention by all of the joint inventors of the subject matter of the claim(s) under rejection. In re Carlson, 79 F.2d. (See MPEP 7.15.04).

None of the above conditions are satisfied; therefore the single signature is inadequate.

Substance

Applicant is attempting to show conception coupled with diligence. However, the evidence submitted is insufficient to establish conception coupled with diligence.

Conception

I. *The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular date. Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice “amounts essentially to mere pleading, unsupported by proof or a showing of facts” and, thus, does not satisfy the requirements of 37 CFR 1.131(b). In re Borkowski, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also In re Harry, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit “asserts that facts exist but does not tell what they are or when they occurred.”) (See MPEP 7.15.07).*

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The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See Mergenthaler v. Scudder, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). As evidence of conception, the exhibit A does not provide a clear explanation. The attachment failed to demonstrate conception of the claimed invention.

Diligence

II. The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the U.S. Patent Application Publication No. U.S. 2002/0101819 to Goldstone reference to either a constructive reduction to practice or an actual reduction to practice. *An inventor is either diligent at a given time or he is not diligent; there are no degrees of diligence. Under 37 CFR 1.131, the critical period in which diligence must be shown begins just prior to the effective date of the reference or activity and ends with the date of a reduction to practice, either actual or constructive (i.e., filing a United States patent application).*

Where conception occurs prior to the date of the reference, but reduction to practice is afterward, it is not enough merely to allege that applicant or patent owner had been diligent. Rather, applicant must show evidence of facts establishing diligence. (See MPEP 715.07 (a)).

As evidence of diligence, the statement “ I worked diligently with a patent attorney in order to file the subject application on May 31, 2001” does not provide a satisfactory evidence of facts establishing diligence.

Conclusion

III. In conclusion, the showing of facts is not sufficient to show:

(A) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to a subsequent (actual)

reduction to practice; or

(C) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to the filing date of the

application (constructive reduction to practice).

Applicant is reminded that the burden is on the applicant to show evidence of conception, diligence and actual reduction to practice. Furthermore, Applicant is required to map the claimed limitation with the exhibit presented as evidence.

Response to Arguments

4. Applicant's arguments filed 4/21/05 in regards to claim 1, 3, 5, 7-8, 10-11, 13-14, 16-, 18, 19-20 have been fully considered but they are not persuasive. As previously stated in the office action, the showing of facts failed to show 1) reduction to practice of the invention prior to the effective date of the reference 2) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to a subsequent (actual) reduction to practice; or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to the filing date of the application (constructive reduction to practice).

5. As per claim 7, 13 and 20, Applicant argues that Klaus failed to teach, “determining whether to change one or more of the configuration settings based on the processing, and changing one or more of the configuration settings based on the determination”. However, Klaus clearly teaches wherein the source/address address generator verifies that each computer on network is emulated in IP spoofing attacks on all of the other computers on network in order to for the inventive system to test all possible attack combinations on a network (See col. 9, lines 1-41).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5, 8, 11, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,389,532 to Gupta et al in view of U.S. Patent Application No. 2002/0101819 to Goldstone.

a. As per claims 1, 8 and 14, Gupta et al teaches a method for preventing malicious network attacks said method comprising: receiving a packet from a client computer (See col. 7, lines 35-37); calculating a number of packets received using the source IP address during a time interval

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(See col. 7, lines 42-44, The number of packets received from the source during the predetermined time period is determined); comparing the number of packets received with one or more configuration settings; determining an action from a plurality of actions based on the comparing'; and executing the action (See col. 7, lines 46-47, the router discards the packet if the rate limit has been exceeded)

Goldstone teaches prevention of bandwidth congestion in a denial of service or other internet-based attack. Furthermore, Godlstone teaches wherein the client computer is identified by a source IP address (See page 3, paragraph [0039]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the client computer is identified by a source IP address as taught by Goldstone in the claimed invention of Gupta et al in order to deny future request to connect that are initiated from an attacking client (See page 3, paragraph [0039]).

c. As per claims 5, 11 and 18, Gupta et al teaches the claimed invention as described above. However, Gupta et al failed to teach receiving a socket request from the client computer; determining a number of sockets opened for the client computer; comparing the number of sockets opened to a socket limit; and determining whether to allow a socket request based on the comparison.

Goldstone teaches prevention of bandwidth congestion in a denial of service or other internet-based attack. Furthermore, Godlstone teaches receiving a socket request from the client computer; determining a number of sockets opened for the client computer; comparing the

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number of sockets opened to a socket limit; and determining whether to allow a socket request based on the comparison (See page 3, paragraph [0038]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate receiving a socket request from the client computer; determining a number of sockets opened for the client computer; comparing the number of sockets opened to a socket limit; and determining whether to allow a socket request based on the comparison as taught by Goldstone in the claimed invention of Gupta et al in order for the router to prevent the attacking client from perpetrating further attacks by blocking traffic originating from the attacking client from entering the Internet (See page 3, paragraph [0027]).

8. Claims 7, 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,389,532 to Gupta et al in view of U.S. Patent Application No. 2002/0101819 to Goldstone as applied to claim 1, 8 and 14 above, and further in view of U.S. Patent No. 5,892,903 to Klaus.

a. As per claims 7, 13 and 20, Gupta et al in view of Goldstone teaches the claimed invention as described above. However, Gupta et al in view of Goldstone failed to teach providing a test script, the test script including one or more attack simulations; processing the attack simulations included in the test script; determining whether to change the configuration settings based on the processing; and changing the configuration settings based on the determination.

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Klaus teaches a method and apparatus for detecting and identifying security vulnerabilities in an open network computer communication system. Furthermore, Klaus teaches providing a test script, the test script including one or more attack simulations; processing the attack simulations included in the test script; determining whether to change the configuration settings based on the processing; and changing the configuration settings based on the determination (See col. 9, lines 1-41)

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate providing a test script, the test script including one or more attack simulations; processing the attack simulations included in the test script; determining whether to change the configuration settings based on the processing; and changing the configuration settings based on the determination as taught by Klaus in the claimed invention of Gupta et al in view of Goldstone in order to detect which computers on a network are susceptible to attacks using predicted TCP sequence numbers (See col. 6, lines 15-20).

Allowable Subject Matter

9. Claims 3,10, 16, 21-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claim 27 is allowed.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Djenane M. Bayard whose telephone number is (571) 272-3878. The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Djenane Bayard

Patent Examiner


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER